AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A process for the processing of image data which represent color values of an image, to achieve reproduction of the image by an image reproduction system, comprising:

a) receiving the image data which represent first positions in a first color space;

b) transforming the first positions into transformation positions ~~which~~ ~~represent positions~~ in a second color space;

inputting the image data which represent first positions in the first color space as image control data into a model image representation system and modeling with a model image reproduction system a response of the image reproduction system to the image data such that the model image reproduction system outputs the response as model positions ~~which~~ wherein the model positions are in a second color space represent the color values produced by the model image reproduction system in response to the input of the image data ~~as positions in a second color space~~; and

c) determining second positions in the second color space based on the transformation positions and the model positions to determine optimized image data for the control of the image reproduction system, wherein the determined second positions are a combination of the transformation positions and the model positions.

2. (Currently Amended) ~~Process~~ The process according to claim 1, wherein the image data can take on control values in a predetermined control value space, and the model image reproduction system produces second model positions in response to all possible control values of the control value space which represent the color values which approximately spread the portion of the second color space reproducible by the model image reproduction system or at least encompass that portion.

3. (Currently Amended) ~~Process~~ The process according to claim 1, wherein the image data can take on control values in a preselected control value space and when all control values of the control value space are subjected to step b), the transformation positions spread a transformation portion of the second color space and the model positions spread a model portion of the second color space, wherein the transformation portion and the model portion overlap in an overlapping portion of the second color space, and wherein:

i) the determination of the second positions is more strongly influenced by the transformation positions than by the model positions when the second positions are closer to a gray value axis of the overlapping portion and/or when first positions corresponding to the second positions are closer to a gray value plane of a part of the first color space spreadable by the received image data; and/or

ii) the determination of the second positions is more strongly influenced by the model positions than by the transformation positions when the second positions are located at an edge of the overlapping portion and/or when first positions

corresponding to the second positions are closer to an edge of the first color space

spreadable by the received image data; and/or

iii) the determination of the second positions is more strongly influenced by

the transformation positions than by the model positions when the second positions

are closer to a center of the overlapping portion and/or when first positions

corresponding to the second positions are closer to a center of the first color space

spreadable by the received image data.

4. (Currently Amended) ~~Process~~ The process according to claim 3, wherein

influencing of the determination of the second positions by the transformation

positions and by the model positions is carried out such that the color values

described by the second positions are a continual function of the image control data.

5. (Currently Amended) ~~Process~~ The process as defined in claim 1, wherein

for the determination of the second positions position values are combined which

describe the positions of the model positions and transformation positions in the

second color space.

6. (Currently Amended) ~~Process~~ The process according to claim 5, wherein

for the determination of the second positions, position values of such model positions

and transformation positions are respectively combined which result from a same

image control value to assign a second position to each image control value.

7. (Currently Amended) ~~Process~~ The process according to claim 4, wherein for a mathematical combination of position values of the second positions which describe brightness are determined from the corresponding position values of the transformation positions and the model positions by way of a weighting, wherein this first weighting is carried out depending on a location of the corresponding first positions and/or transformation positions and/or model positions relative to a gray value axis or to one or more points on the gray value axis; and/or wherein for a mathematical combination of those position values of the second positions which describe hue and/or color saturation are determined from the corresponding position values of the transformation positions and the model positions by way of a second weighting, wherein this second weighting is carried out depending on a location of the corresponding first positions, transformation positions and/or model positions relative to a next closest boundary surface or boundary of the portion of the respective color space respectively spreadable by the respective positions.

8. (Currently Amended) ~~Process~~ The process according to claim 1, wherein the first color space is a device dependent color space, and the second color space is a device independent color space, wherein the model image reproduction system represents an idealized model of the image reproduction system, and the second positions are transformed into third positions which represent color values in a third color space which mirrors the color space of the <u>image reproduction system, wherein the image reproduction system is a</u> non-idealized image reproduction system.

9. (Currently Amended) A computer readable medium storing a program Program which when loaded on or running on a computer initiates the computer to carry out the process according to claim 1.

10. (Cancelled)

11. (Currently Amended) A photographic Photographic printer or photolab, comprising: a unit for receiving image data; a data processing unit for processing the received image data according to the process of claim 1 to optimize the image data; and an image recording system for producing a photographic image based on the optimized image data on a recording medium.

12. (Cancelled)

13. (Currently Amended) Process The process according to claim 8, wherein the first color space is an RGB color space, and the second color space is a CIE-LAB color space or CIEXYZ color space.

14. (Currently Amended) Photographic The photographic printer or photolab of claim 11, wherein the medium is paper or photographic paper.

15. (New) A process for the processing of image data which represent color values of an image, to achieve reproduction of the image by an image reproduction system, comprising:

a) receiving the image data which represent first positions in a first color space;

b) transforming the first positions into transformation positions which represent positions in a second color space; and modeling with a model image reproduction system a response of the image reproduction system to the image data such that the model image reproduction system outputs the response as model positions which represent the color values produced by the model image reproduction system in response to the input of the image data as positions in a second color space; and

c) determining second positions in the second color space based on the transformation positions and the model positions to determine optimized image data for the control of the image reproduction system;

wherein the image data can take on control values in a preselected control value space and when all control values of the control value space are subjected to step b), the transformation positions spread a transformation portion of the second color space and the model positions spread a model portion of the second color space, wherein the transformation portion and the model portion overlap in an overlapping portion of the second color space, and wherein:

i) the determination of the second positions is more strongly influenced by the transformation positions than by the model positions when the second positions are closer to a gray value axis of the overlapping portion and/or when first positions corresponding to the second positions are closer to a gray value plane of a part of the first color space spreadable by the received image data; and/or

ii) the determination of the second positions is more strongly influenced by the model positions than by the transformation positions when the second positions are located at an edge of the overlapping portion and/or when first positions corresponding to the second positions are closer to an edge of the first color space spreadable by the received image data; and/or

iii) the determination of the second positions is more strongly influenced by the transformation positions than by the model positions when the second positions are closer to a center of the overlapping portion and/or when first positions corresponding to the second positions are closer to a center of the first color space spreadable by the received image data;

wherein influencing of the determination of the second positions by the transformation positions and by the model positions is carried out such that the color values described by the second positions are a continual function of the image control data; and

wherein for a mathematical combination of position values of the second positions which describe brightness are determined from the corresponding position values of the transformation positions and the model positions by way of a weighting, wherein this first weighting is carried out depending on a location of the corresponding first positions and/or transformation positions and/or model positions relative to a gray value axis or to one or more points on the gray value axis; and/or wherein for a mathematical combination of those position values of the second positions which describe hue and/or color saturation are determined from the corresponding position values of the transformation positions and the model positions by way of a second weighting, wherein this second weighting is carried out

depending on a location of the corresponding first positions, transformation positions and/or model positions relative to a next closest boundary surface or boundary of the portion of the respective color space respectively spreadable by the respective positions.